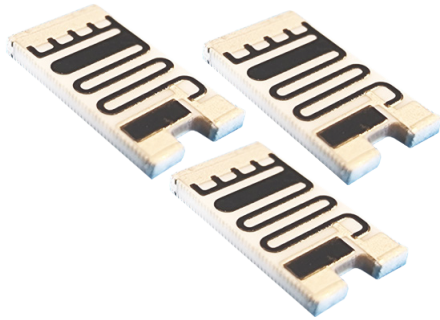




- Surface mount thick film technology
- High voltage chip resistor divider with two resistors
- 10Ω to 1GΩ Resistance range
- Divider ratios up to 1000:1 with precision to 0.25%
- Customer specific resistance value combination
- Suitable for high vacuum applications - no organics
- Variety of terminal options available - see table 3
- Working voltage up to 4kV
- Low relative temperature TCRs to 15ppm/°C
- Non magnetic - SXD1 & SXD4
- SMD Sizes: 2512 and 4020



Technical Data - Depending on size (R1 > R2)

Table 1

Size	Specification	2512	4020	
Power rating P ₇₀ (W) (P ₁₅₅ = 0W)	R1 + R2	1W	2W	
Maximum working voltage V ¹	R1 + R2	2kV	4kV	
Highest value	R1	1G	1G	
Lowest value	R2	10R	10R	
Resistance ratio minimum	R1:R2	50:1	50:1	
Resistance ratio maximum	R1:R2	500:1	1000:1	
Resistance / Tolerance % / Temperature Coefficient (TCR) ppm°C ² (Lower resistance tolerances, TCR on request & by agreement) Extreme values not achievable together in all cases.				
10R - 1M	± % ppm/°C	R1	0.5, 1, 2, 5, 10, 20 50, 100	0.5, 1, 2, 5, 10 50, 100
1M - 10M	± % ppm/°C	R1	1, 2, 5, 10 50, 100	1, 2, 5, 10 50, 100
10M - 100M	± % ppm/°C	R1	0.5, 1, 2, 5, 10, 20 25, 50, 100	0.25, 0.5, 1, 2, 5, 10, 20 25, 50, 100
>100M - 500M	± % ppm/°C	R1	1, 5, 10, 20 25, 50, 100	0.5, 1, 2, 5, 10, 20 25, 50, 100
>500M - 1G	± % ppm/°C	R1	1, 5, 10, 20 100, 250	1, 5, 10/20 25, 50, 100

¹) Custom specific parts: Max. working voltage depends on resistance value and ratio, the max. working voltage is not for all available combinations. Continuous operating voltage (U_{-} , U_{eff}) $V \leq \sqrt{P \cdot R}$ or max. working voltage (whichever is the lower)

²) Temp. coefficient TCR: in ppm/K; +25°C...+125°C; TCR lower than standard TCR (highest value) or >100G: +25°C...+85°C

Technical Data - General

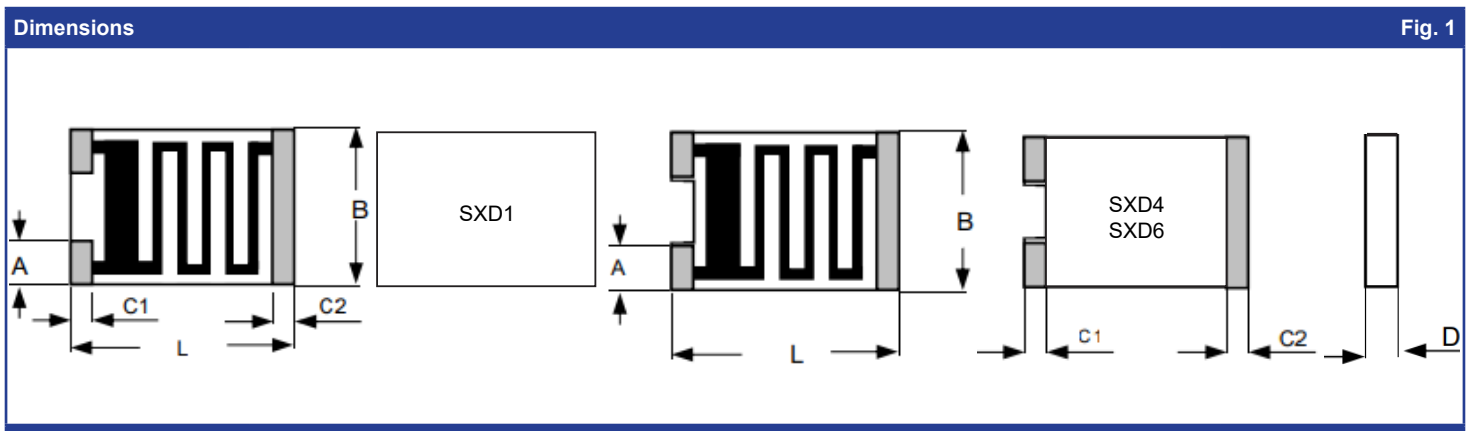
Operating temperature range	-55°C to +155°C	
Climatic category acc. to EN 60068-1	55/155/56	
Solderability acc. to EN 60068-2-58 (lead-free and lead-containing) ³	250°C, 3s	
Max. soldering temperature acc. to EN 60068-2-58	260°C, 10s	
Long term stability	< 10MΩ	< 10MΩ - 1GΩ
Load Life 70°C/1000h	< 0.5%	< 0.5%
Storage 125°C/1000h	< 1%	< 1%
Max. voltage/1000h	< 0.5%	< 0.5%
Short term overload (2.5 x 5s)	<0.25%	-

³ Up to 6 months after shipment (air, 30°C/60%rH) or up to 12 months at storage in nitrogen or in evacuated dry packs.

Other data according to EN 140401-802 (CECC 40401-802).

Dimensions (mm)					Table 2
Size	L (Length)	B (Width)	D (Thickness)	A	C1 / C2
2512	6.30 +0.15/-0.05	3.50 +0.2/-0.05	0.60 +0.15/-0.05	1.0 +0.2	0.6 ±0.2
4020	10.20 +0.15/-0.05	5.10 +0.2/-0.05	0.60 +0.15/-0.05	1.0 +0.2	0.6 ±0.2

Terminations				Table 3
Variety	Non-Magnetic	Termination	Assembly	
SXD1	Yes	AgPd 1-side, no wrap around	Flip chip / face down; soldering or conductive epoxy	Ⓔ4
SXD4	Yes	PtAg 3-sides, with wrap around	Face up assembly; soldering or conductive epoxy	Ⓔ4
SXD6	No	NiSn 3-sides, with wrap around	Face up assembly; soldering only (MOQ 1000 pcs.)	Ⓔ3



Packaging	
Bulk in plastic bags	Contact Durakool for minimum order quantities
Embossed carrier tape acc. to IEC 60286-3	Contact Durakool for minimum order quantities
Reel diameter	180 or 330mm

Example Ordering Code						
S X D 1 2 5 1 2 1 0 M 0 K 1 0 0 4 0 0 1 ± 5						
Series	Case Size	Resistance Ω	Tolerance ± % (See table 1)	Temperature Coefficient TCR	Divider Ratio	Tolerance Ratio
SXD1	2512, 4020	10Ω - 1GΩ	B ± 0.1 F ± 1 K ± 10	15 to 250ppm (See table 1)	400:1	±2%, ±5%
SXD4			C ± 0.25 G ± 2 M ± 20		875:1	
SXD6			D ± 0.5 J ± 5 N ± 30			

NB: Standard TCR will be the highest value in the table unless otherwise requested. Measuring voltage will be 10V. Other voltages are available - specific requirements must be requested.